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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,203	04/27/2007	Harold T. Woods	0062P-35US	7254
7590 12/22/2010 Whitesell International Corporation 401 E. Tuscaloosa Street Florence, AL 35630			EXAMINER OMCBA, ESSAMA	
			ART UNIT 3726	PAPER NUMBER
			MAIL DATE 12/22/2010	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/594,203

Applicant(s)

WOODS, HAROLD T.

Examiner

Essama Omgba

Art Unit

3726

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-41 and 43-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-38, 40, 41 and 43-46 is/are rejected.
- 7) ☒ Claim(s) 39 and 47 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The indicated allowability of claims 28-38, 40, 41, 43-46 is withdrawn in view of the newly discovered reference(s) to Goodsmith (US Patent 4,649,753) and Krcek et al. (US Patent 6,401,507). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 28-31, 33-35, 37-40, 43, 45, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodsmith in view of Krcek et al.

With regards to claims 28 and 38, Goodsmith discloses a pierce nut installation apparatus for installing pierce nuts into a panel, the apparatus comprising a pierce nut installation head having a plunger for receiving a pierce nut 15 for installation into the panel 16 (this is conventional in the art), a plunger reciprocating in the plunger passage having a proximal end driving the pierce nuts through the plunger passage into the panel piercing a slug from the panel thereby forming an opening in the panel and installing the pierce nut into the opening in the panel left by the slug (this is conventional in the art), the plunger having an axial opening telescopically receiving a slug probe rod resiliently biased toward the proximal end of the plunger and extending beyond the proximal end of the plunger through the bore disposed in the pierce nut thereby

ensuring a slug is pierced from the panel (col. 3, lines 27-68 and col. 4, lines 1-30). Goodsmith does not disclose an ejector interacting with the slug pierced from the panel thereby ejecting the slug from the lower installation assembly and a slug sensor located beneath the panel for sensing if the slug has been pierced from the panel and has been ejected from the pierce nut installation apparatus. However Krcek et al. teaches a slug ejector and a slug sensor for sensing if a slug has been pierced from a part and has been ejected from an apparatus, see column 3, lines 21-26 and column 8, lines 22-30. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided a slug ejector for ejecting a slug from the lower installation assembly and a slug sensor located beneath the panel for sensing if the slug has been pierced from the panel and has been ejected from the pierce nut installation apparatus in the apparatus of Goodsmith, in light of the teachings of Krcek et al., in order to provide a highly efficient and reliable way of ensuring that a slug is pierced and ejected from the pierce nut installation apparatus.

Regarding claim 29, Applicant should note that it is conventional for such pierce nut installation apparatuses to have a die button disposed beneath the plunger, the die button having an annular opening for receiving a slug pierced from a panel.

Regarding claims 30, 31, 33-35, 40 and 46, Applicant should note that the location of the slug sensor is an obvious matter of design choice as long as the slug sensor effectively senses if a slug has been pierced from a panel and has been ejected from the pierce nut installation apparatus.

Regarding claim 37, see spring 40 in figures 1-4 of Goodsmith.

Regarding claim 43, Applicant should note that the slug ejector taught by Krcek et al. is structurally equivalent to the claimed spring biased ejector.

Regarding claim 45, see column 8, lines 22-30 of Krcek et al.

4. Claims 32, 36, 41 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodsmith/Krcek et al. as applied to claims 28 and 34 above, and further in view of Baker et al. (US Patent 5,455,848).

Goodsmith/Krcek et al. disclose a pierce nut installation apparatus as shown above except for specifically disclosing the slug sensor being an electric current sensor or a conductive magnetic field generating sensor. However Baker et al. teaches slug sensors that could be any type of known sensors, see column 4, lines 39-46. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used an electric current sensor or a conductive magnetic field generating sensor in the apparatus of Goodsmith/Krcek et al., in light of the teachings of Baker et al., as is known in the art.

Allowable Subject Matter

5. Claims 39 and 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 28-38, 40, 41 and 43-46 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Essama Omgba/
Primary Examiner, Art Unit 3726

eo
December 20, 2010